

Amendments to Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Please amend the claims as follows:

Claims 1-4 (Cancelled).

Claims 5 (Withdrawn) An isolated and purified LERK-6 polypeptide that binds hek/elk.

Claims 6 (Withdrawn) An isolated and purified LERK-6 polypeptide that comprises an amino acid sequence that is at least 90% identical to the sequence of amino acid residues selected from the group consisting of 1 to 184 of SEQ ID NO:2 and 1 to 104 of SEQ ID NO:8.

Claims 7 (Withdrawn) A LERK-6 polypeptide according to claim 5, encoded by the nucleotide sequence according to claim 4.

Claims 8 (Withdrawn) An isolated and purified LREK-6 polypeptide that comprises an amino acid sequence that is at least 90% identical to the sequence of amino acid residues selected from the group consisting of 1 to 145 of SEQ ID NO:2 and 1 to 104 of SEQ ID NO:8.

Claims 9 (Withdrawn) An isolated and purified LERK-6 polypeptide that comprises the amino acid residues 1 to 145 of SEQ ID NO:2.

Claims 10 (Withdrawn) An isolated and purified LERK-6 polypeptide that comprises the amino acid residues 1 to 104 of SEQ ID NO:8.

Claims 11 (Withdrawn) A polypeptide according to claim 5 that is encoded by the cDNA insert of vector λ gt10 having accession number ATCC 75829.

Claims 12-23 (Cancelled).

Claims 24 (Withdrawn) An isolated and purified antibody that is immunoreactive with a LERK-6 polypeptide.

Claims 25 (Withdrawn) An antibody according to claim 23 that is a monoclonal antibody.

Claims 26 (Withdrawn) A transgenic non-human mammal all of whose germ and somatic cells contain a DNA sequence according to claim 1 introduced into said mammal, or an ancestor of said mammal, at an embryonic stage.

Claims 27 (Withdrawn) A method of separating cells having a LERK-6 polypeptide according to Claim 5 thereon, and separating the contacting surface and the suspension.

Claims 28 (Withdrawn) A method for delivering a desired molecule to a cell having hek/elk on its surface, comprising contacting the hek/elk with a fusion protein comprising a LERK-6 polypeptide according to claim 5 and the desired molecule.

Claim 29. (Previously presented) An isolated DNA molecule encoding a LERK-6 polypeptide that binds hek/elk, wherein said polypeptide comprises amino acids 1 to 184 of SEQ ID NO:2.

Claim 30 (Previously presented) An isolated DNA molecule encoding a LERK-6 polypeptide that binds hek/elk, wherein said polypeptide comprises amino acids 1 to 145 of SEQ ID NO:2.

Claim 31. (Previously presented) An isolated DNA molecule encoding a LERK-6 polypeptide that binds hek/elk, wherein said polypeptide comprises amino acids 1 to 134 of SEQ ID NO:2.

Claim 32. (Previously presented) The isolated DNA molecule of Claim 29, wherein said DNA molecule comprises nucleotides 1 to 552 of SEQ ID NO:1.

Claim 33. (Previously presented) The isolated DNA molecule of Claim 30, wherein said DNA molecule comprises nucleotides 1 to 435 of SEQ ID NO:1.

Claim 34. (Previously presented) The isolated DNA molecule of Claim 31, wherein said DNA molecule comprises nucleotides 1 to 402 of SEQ ID NO:1.

Claim 35. (Previously presented) An expression vector comprising a DNA molecule of Claim 29.

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| Claim 36. (Previously presented) | An expression vector comprising a DNA molecule of Claim 30. |
| Claim 37. (Previously presented) | An expression vector comprising a DNA molecule of Claim 31. |
| Claim 38. (Previously presented) | An expression vector comprising a DNA molecule of Claim 32. |
| Claim 39. (Previously presented) | An expression vector comprising a DNA molecule of Claim 33. |
| Claim 40. (Previously presented) | An expression vector comprising a DNA molecule of Claim 34. |
| Claim 41. (Previously presented) | A host cell transformed or transfected with a expression vector of Claim 35. |
| Claim 42. (Previously presented) | A host cell transformed or transfected with a expression vector of Claim 36. |
| Claim 43. (Previously presented) | A host cell transformed or transfected with a expression vector of Claim 37. |
| Claim 44. (Previously presented) | A host cell transformed or transfected with a expression vector of Claim 38. |
| Claim 45. (Previously presented) | A host cell transformed or transfected with a expression vector of Claim 39. |
| Claim 46. (Previously presented) | A host cell transformed or transfected with a expression vector of Claim 40. |
| Claim 47. (Previously presented) | A process for preparing a LERK-6 polypeptide, comprising culturing a host cell of Claim 41 under conditions promoting expression of LERK-6 polypeptide, and recovering the LERK-6 polypeptide so expressed. |

Claim 48 (Previously presented) A process for preparing a LERK-6 polypeptide, comprising culturing a host cell of Claim 42 under conditions promoting expression of LERK-6 polypeptide, and recovering the LERK-6 polypeptide so expressed.

Claim 49. (Previously presented) A process for preparing a LERK-6 polypeptide, comprising culturing a host cell of Claim 43 under conditions promoting expression of LERK-6 polypeptide, and recovering the LERK-6 polypeptide so expressed.

Claim 50. (Previously presented) A process for preparing a LERK-6 polypeptide, comprising culturing a host cell of Claim 44 under conditions promoting expression of LERK-6 polypeptide, and recovering the LERK-6 polypeptide so expressed.

Claim 51 (Previously presented) A process for preparing a LERK-6 polypeptide, comprising culturing a host cell of Claim 45 under conditions promoting expression of LERK-6 polypeptide, and recovering the LERK-6 polypeptide so expressed.

Claim 52 (Previously presented) A process for preparing a LERK-6 polypeptide, comprising culturing a host cell of Claim 46 under conditions promoting expression of LERK-6 polypeptide, and recovering the LERK-6 polypeptide so expressed.

Claim 53. (Previously presented) Recombinant phage λ gt10 vector clone λ 13M LERK-6 having ATCC No. 75829.

Claim 54. (Previously presented) The cDNA insert in recombinant phage λ gt10 vector clone λ 13M LERK-6 having ATCC No. 75829.

Claim 55. (Previously presented) An expression vector comprising the cDNA insert of claim 54.

Claim 56. (Previously presented) A host cell transformed or transfected with a expression vector of Claim 55.

Claim 57. (Previously presented) A process for preparing a LERK-6 polypeptide, comprising culturing a host cell of Claim 56 under conditions promoting expression of LERK-6 polypeptide, and recovering the LERK-6 polypeptide so expressed.

Claim 58. (Currently amended) An isolated DNA that encodes a polypeptide that is at least 80% identical to the polypeptide of SEQ ID NO:2, wherein the polypeptide encoded by the DNA binds hek/elk.

Claim 59. (Currently amended) An isolated DNA the encodes a polypeptide that is at least 80% identical to amino acids 1-145 of SEQ ID NO:2, wherein the polypeptide encoded by the DNA binds hek/elk.

Claim 60. (Currently amended) An isolated DNA the encodes a polypeptide that is at least 80% identical to amino acids 1-134 of SEQ ID NO:2, wherein the polypeptide encoded by the DNA binds hek/elk.

Claim 61. (Currently amended) An isolated DNA selected from the group consisting of:

- a) DNA that hybridizes under [highly stringent] conditions of moderate stringency to the DNA of SEQ ID NO:1,. and which DNA encodes a polypeptide that binds hek/elk and which conditions include a prewashing solution of 5 X SSC, 0.5% SDS, 1.0 mM EDTA (pH 8.0) and hybridization at about 55°C, 5 X SSC, overnight.
- b) DNA that hybridizes under [highly stringent] conditions of moderate stringency to the nucleotides 1-402 of SEQ ID NO:1,. and which DNA encodes a polypeptide that binds hek/elk and which conditions include a prewashing solution of 5 X SSC, 0.5% SDS, 1.0 mM EDTA (pH 8.0) and hybridization at about 55°C, 5 X SSC, overnight.
- c) DNA that hybridizes under [highly stringent] conditions of moderate stringency to nucleotides 1-435 of SEQ ID NO:1,. and which DNA encodes a polypeptide that binds hek/elk and which conditions include a prewashing solution of 5 X SSC, 0.5% SDS, 1.0 mM EDTA (pH 8.0) and hybridization at about 55°C, 5 X SSC, overnight.